



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/816,202

03/31/2004

Ajay Pratap Singh Kushwah

LEGAP024

7502

57255

7590

03/16/2009

VAN PELT, YI & JAMES LLP AND EMC CORPORATION
10050 N. FOOTHILL BLVD.
SUITE 200
CUPERTINO, CA 95014

EXAMINER

ORTIZ, BELIX M

ART UNIT

PAPER NUMBER

2164

MAIL DATE

DELIVERY MODE

03/16/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/816,202	Applicant(s) KUSHWAH ET AL.	
	Examiner BELIX M. ORTIZ	Art Unit 2164	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 November 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 10-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 10-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Remarks

1. In response to communications filed on 25-November-2008. Claims 1 and 20-21 are amended and claim 22 is added by applicants request. Therefore, claims 1-8 and 10-21 are presently pending in the application.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-8 and 10-22 are rejected under 35 U.S.C. 102(b) (Eff. Filing date of application: 10/29/2002) as being anticipated by St. Pierre et al. (U.S. Pub. 2005/0187992) (hereinafter Pierre) (Eff. Filing date of application: 6/30/1978).

As to claims 1 and 21, Pierre teaches a computer-implemented method for identifying a file system element for restoration (see fig. 9 and col. 5, lines 32-45) comprising:

receiving a request to restore a file system element (see col. 13, lines 16-21);

determining an offset, from a beginning of a collection of records, indicating where a record associated with the file system element is located within the collection of records(see figure 9, characters 92, 94, and 96; col. 12, lines 9-15; col. 18, lines 47-52; and claim 29 and 31), wherein:

Art Unit: 2164

the record includes metadata related to stored data to be used to restore the file system element (see abstract and col. 6, lines 27-30); and

the offset varies in accordance with the lengths of other records in the collection of records, if any, that are located before said record (see figs. 13 and 15, character 150; col. 17, lines 66-67; col. 18, lines 1-3; and col. 18, lines 47-49); and

using the determined offset to retrieve the record from the collection of records on a storage device (see fig. 9; col. 6, lines 37-31; and col. 20, lines 53-60).

As to claim 2, Pierre teaches the method further comprising determining the type of file system element being restored (see fig. 9, character 98A and 98B).

As to claim 3, Pierre teaches wherein a most significant bit indicates the type of file system element being restored (see fig. 2B and 13 and col. 3, lines 61-65).

As to claim 4, Pierre teaches wherein the most significant bit is stored in a table (see fig. 2B and 13).

As to claims 5 and 15, Pierre teaches wherein one type of file system element is a file (see fig. 9, character 90).

As to claim 6, Pierre teaches wherein a file metadata file includes a collection of records for file system objects that are files (see col. 10, lines 56-58).

Art Unit: 2164

As to claims 7 and 16, Pierre teaches wherein one type of file system element is a directory (see col. 1, lines 39-42 and col. 1, lines 56-59).

As to claim 8, Pierre teaches wherein a directory metadata file includes a collection of records for file system objects that are files (see col. 10, lines 56-58 and col. 1, lines 39-42) .

As to claim 10, Pierre teaches wherein the metadata includes administrative information (see col. 9, lines 63-65).

As to claim 11, Pierre teaches wherein the metadata includes permissions (see col. 9, lines 63-65 and col. 11, line 40).

As to claim 12, Pierre teaches wherein the metadata includes a value that uniquely identifies the file system element associated with the file system element (see fig. 11 and col. 20, lines 38-44).

As to claim 13, Pierre teaches wherein the record id a first recode and determining an offset includes retrieving a second record associated with the file system element being restored the includes the offset of the first record (see fig. 9).

Art Unit: 2164

As to claim 14, Pierre teaches wherein the offset is stored in a table (see figure 13).

As to claim 17, Pierre teaches the method further comprising determining a second offset of a second record associated with the record (see figure 13).

As to claim 18, Pierre teaches wherein the association of the record with the file system element occurs via an inode (see col. 25-29 and col. 1, lines 41-46).

As to claim 19, Pierre teaches wherein the association of the record with the file system element occurs via a value that uniquely identifies the file system element (see figure 11).

As to claim 20, Pierre teaches a system for identifying a file system element for restoration comprising:

a processor configured to:

receiving a request to restore a file system element (see col. 13, lines 16-21);

determining an offset, from a beginning of a collection records, indicating where a record associated with the file system element is located within the collection of records (see figure 9, characters 92, 94, and 96; col. 18, lines 47-52; and claims 29 and 31), wherein:

the record includes metadata related to stored data to be used to restore the file system element (see abstract; claim 31; and col. 6, lines 27-30); and

Art Unit: 2164

the offset varies in accordance with the lengths of other records in the collection of records, if any, that are located before said record (see fig. 15, character 150; col. 17, lines 66-67; col. 18, lines 1-3; and col. 18, lines 47-49); and
use the determined offset to retrieve the record from the collection of records (see fig. 9; and col. 20, lines 53-60); and
a storage device on which the collection of record is stored (see col. 3, lines 25-32 and col. 6, lines 27-31).

As to claim 22, Pierre teaches wherein the record has a variable length (see fig. 13, character 135).

Response to Amendment

4. Applicant's arguments filed 25- November- 2008 with respect to the rejected claims in view of the cited references have been fully considered but they are not found persuasive:

In response to applicants' arguments that "Pierre, fail to teach or suggest determining an offset, from a beginning of a collection of records, indicating where a record associated with the...", the arguments have been fully considered but are not deemed persuasive, because Pierre teaches "Restoration may proceed by determining which segments have changed since a target time, and retrieving the data backed up from that time", (see abstract).

"a method of restoring a primary copy of a plurality of segments of data stored on a physical storage device is disclosed. According to this embodiment, the plurality of segments

Art Unit: 2164

forms a logical element and the restoration is to a state of the primary copy of a target time. This embodiment includes steps of identifying which of the segments of data have changed since the target time and restoring the identified changed segments to the primary copy, while retaining at least one of the segments already in the primary copy”, (see col. 6, lines 28-38).

“The length of one also indicates that a single data segment is being included as the first portion of the differential bit file 130. Of course, even in an embodiment where offset and length is used, other measures may be used to indicate length. For example, rather than indicating offset and lengths in units corresponding to the length of a data segment, other units may be used (such as bytes, data blocks or tracks)", (see col. 17, 66-67 and col. 18, lines 1-8).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Art Unit: 2164

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Belix M. Ortiz whose telephone number is 571-272-4081. The examiner can normally be reached on moday-friday 9am-5pm.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/B M O/
Examiner of Art Unit 2164

March 9, 2009

/Charles Rones/

Supervisory Patent Examiner, Art Unit 2164